



## INTRODUCTION

*for the Airport Master Plan for  
Whiteriver Airport*

### 1.0 INTRODUCTION

The White Mountain Apache Tribe, as the Airport Sponsor, is continuing its effort to plan for future improvement of the Whiteriver Airport. This development is designed to enhance air and ground operations, improve safety, provide better airport services, and stimulate economic development through increased use of the airport.

### 1.1 PURPOSE AND NEED

The Airport Master Plan is the culmination of a decision making process in which the Airport Sponsor, with input from the community, Local, State, and Federal agencies, and the consultant, determines the needs and priorities for the long term development of the airport. The Master Plan provides a conceptual picture of the airport development through the use of the Airport Layout Plan drawing set. Airport Master Plans are prepared to support modernization of existing airports, regardless of size, complexity, or role.

This airport planning document for the Whiteriver Airport was developed with this purpose in mind. The demands being placed on the airport are creating a need for a safer and more efficient facility for its users. There are several facets requiring analysis to determine whether or not FAA Safety and Design Standards are met. These elements include, but are not limited to, runway length, and width requirements, runway-taxiway separation, apron size and configuration, safety and object free area penetrations, and Federal Aviation Regulation (FAR) Part 77 airspace considerations. The most pressing need for the airport is to rehabilitate the existing airfield pavement and to meet FAA Safety and Design Standards. This planning document will help determine the improvements needed at the airport and guide the Sponsor in the implementation of airport improvement and development projects.

Whiteriver Airport functions as an important component of the regional general aviation community. The airport is a general aviation facility serving as an air tanker

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base for the Bureau of Indian Affairs (BIA) Fire Management Department. The airport serves air medivac, business, recreational, and training flights as well. The airport has three based aircraft from April through September for wild fire suppression operations. Due to the existing condition of the runway, only small air tanker aircraft use Whiteriver Airport. Upon the completion of pavement rehabilitation, large tanker aircraft will be able to use the airport, thus, increasing the BIA's fire fighting capabilities.

## **1.2 GOALS AND OBJECTIVES**

The overall objective of this airport planning document is to evaluate alternatives for the ultimate development of the airport and to assess the compatibility of such development with the environment and the goals of the White Mountain Apache Tribe. Specific objectives of this study were defined as follows:

- An inventory of existing air operations and facilities.
- A forecast of aviation demand based on socioeconomic and population information and available historical air traffic data.
- Determine current types of aircraft which use the Whiteriver Airport and from there, determine whether or not the current facilities are adequate for this traffic.
- Determine requirements for new or expanded airport facilities, such as runway extensions, taxiways, aircraft parking aprons, hangars, lighting systems, navigational aids, ground access, and overall land needs to assure airport expansion as needed and future long-term land use compatibility. These facilities were also examined in terms of meeting FAA design criteria.
- An alternative analysis of new facilities and/or reconfiguration of existing facilities that will be required, and a proposed development schedule, including cost estimates.
- Preparation of a new Airport Layout Plan Drawing Set.

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### 1.3 AIRPORT MASTER PLAN ELEMENTS

Each element described below is contained as a separate Chapter of this Airport Master Plan report. Accomplishing the elements in a logical sequential order results in a comprehensive planning effort, which in turn provides the Sponsor with the needs and priorities for the long term development of the airport.

- **Facility Inventory** - An on-site inspection of airport facilities was accomplished to evaluate and document the existing conditions and features of the airport. Related information, including existing studies, maps, reports, and airport records were gathered to be used in the study.
- **Socioeconomic Characteristics** - Local and regional factors which would affect aviation demand, such as population, employment, and income were compiled to provide information to be used in the forecasting element.
- **Forecasts of Aviation Demand** - Aviation activity forecasts, including based aircraft and annual aircraft operations, were prepared. These forecasts are used to determine the necessary airport improvements to accommodate the projected demand.
- **Facility Requirements** - Based on the forecasts prepared in the previous element, the specific airside and landside facilities (including runways, taxiways, aprons, lighting, visual aids, hangars, and fueling facilities) needed to meet the associated aviation demand, and FAA safety and design standards, were determined.
- **Development Alternatives** - This element presented logical development alternatives for correcting deficiencies in FAA safety and design standards, and for accomplishing various improvements to meet the forecasted demand. Upon review of the alternatives, the Sponsor selected a preferred development action.
- **Environmental Overview** - A review of the environmental impact categories listed in FAA Order 5050.4A was conducted to determine if any significant environmental impacts would result from the proposed airport development actions.
- **Capital Improvement Plan** - Estimated costs to accomplish the recommended development projects were prepared. The Capital Improvement Plan (CIP) includes a breakdown of federal, state, and local cost shares into short-term (0-5 years) medium-term (6-10 years), and long-term (11-20 years) time frames.
- **Financial Plan** - The financial plan provides information on federal and state aid programs to airports, as well as mechanisms for funding the local share portion of capital project costs. It also discusses airport revenue sources and expense categories.
- **Airport Layout Plans** - A set of plans, referred to as the Airport Layout Plan (ALP) drawing set has been prepared to graphically depict the recommendations for airfield layout, correction of non-standards conditions, disposition of obstructions, future land uses in the vicinity of the airport, and existing and future airport property boundaries.

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## 1.4 PLANNING ASSUMPTIONS

In order to accomplish the elements listed above, several general planning assumptions were required. Based on indications from the BIA and FAA, we are strongly confident the first two assumptions will remain consistent throughout the planning period. Although the Tribe is attempting to control the population growth rate, we believe their efforts will likely result in maintaining population growth at its current rate of 3.3% per year, rather than further reducing it.

- The Bureau of Indian Affairs (BIA) Forestry Division will continue to operate a Fire Management Air Base at the Whiteriver Airport.
- The Airport Improvement Program (AIP), or similar Federal funding mechanism, will continue to provide airport development grants in airports in Arizona at a rate of 91.06%.
- Population growth in Whiteriver will continue at its current rate throughout the planning period.